She Finds Shipbuilding Like Dressmaking

Mrs. Harrison of Baltimore, Who Donned Overalls, Says Women Can Do Much of the Work

Proves Apt at Even Such Hard Tasks as Riveting, but Muscular Strain Is Severe

"MANY a woman who stands all day over a washtub and an ironing board, cooks three meals and looks after a brood of small children has a far harder job than most men in the shipyards."

This is the conclusion of Mrs. Marguerite E. Harrison, widow of Thomas B. Harrison of Baltimore, based on a week's experiences in overalls as a shipbuilder for the Bethlehem Shipbuilding Corporation at Sparrows Point, Md.

Thousands of women have been engaged in shipbuilding during the past three years in England, where many vessels have been launched and delivered, all parts of which were turned out by the hands that rock the cradle. Believing that the time may come when the wives and mothers and sisters of the men who must fight will be needed for shipyard work in the United States, Mrs. Harrison applied for and got her job, determined to find out just what a woman shipbuilder would be called upon to do and whether she could do it.

Only Woman Among 7,650 Men.

She was the first woman shipyard worker in this country, and as the only woman among 7,650 men in the plant she worked as a helper in various departments, performing her tasks with an aptitude that won the admiration of her bosses. She is convinced that if labor in this country becomes so scarce that women are called upon to fill the gaps in the shipyards they will not find the work too hard for them.

Mrs. Harrison belongs to one of the oldest and best known families in Baltimore. She is a daughter of Bernard N. Baker, founder of the Atlantic Transport Company, which was taken over by the International Mercantile Marine. Mr. Baker was one of the early commissioners of the United States Shipping Board.

Mrs. Harrison's husband was a stock and bond broker.

"When I first applied to the manager at Sparrows Point for permission to work in the plant for a week," Mrs. Harrison said, "he was very dubious.

"'You could never stand the work,' he said. 'It is very rough and very hard on any one who has not been accustomed to manual labor.'

"'I know that,' I replied, 'but women have been doing it in England for three years and I guess I can stand it for a week.'

"'They are working in groups,' the manager returned. 'You will be alone among over 7,000 men. You may find their attitude disagreeable.'

"That I didn't believe, and I told him so. Later I found that I was absolutely right. When I put on overalls and went to work among those 7,000 men I never had a single experience that made me regret the experiment.

Proud of American Manhood.

"Of course there was curiosity about me and some opposition, but if I had gone to church in an unsuitable costume I would have felt more uncomfortable than I did after the first day in the yard. It made me very proud of our American men.

"After some argument I convinced the manager that I meant business and in due course of time I was signed on at the plant. I was assigned to the drillers, riveters and reamers' department as a helper at the rate of 40 cents an hour. When I pinned on my badge I felt a thrill of pride. It was the first time that any woman in the United States had had the right to wear one.

"I wasn't proud though when I made my first appearance in the yard. I was painfully conscious of my overalls. It wasn't the overalls—thousands of women wear them—it was the fact that I was so hopelessly outnumbered by the men. Fortunately for me the news of my arrival had not got about and there was a comparatively small audience when I started work in the assembly yard.

MRS. MARGUERITE B. HARRISON IN CIVILIAN DRESS AND IN HER SHIPYARD GARB.

"I was told to hunt clips and stepney bars for a transverse frame that was just being bolted up. A transverse is half of one of the huge steel ribs that go to form the skeleton of the ship. They are assembled, bolted and riveted in the yard and then put in place in the hull. They are all numbered and there are lefts and rights.

"To the green man it is a most complicated matter to learn where they all go. To me it was comparatively simple, as it would be to most women, because I was used to patterns. It seems a far cry from dressmaking to shipbuilding, but nevertheless there is some connection between them.

"Later, when I worked in the mould loft, drafting the full size templates or moulds from which the plates and shapes that make the hulls are fabricated, and again in the stock yards marking the plates for fabrication for these same patterns, I found that I had struck another dressmaking proposition, combined with the use of mathematics, such as any high school girl knows. Both of these jobs would be suitable and interesting for women.

"During my first morning in the yard I wasn't exactly popular with the foremen, and I rather think that one of them intended to get my goat when he suggested after dinner that I should try my hand at riveting.

"Now, the riveter's work is one of the most vital parts of shipbuilding. The average 8,000 ton ship contains about 500,000 rivets, and every one must be driven by a pneumatic hammer operated by a man. The pressure is about 100 pounds to the square inch, and it takes considerable strength to hold the hammer, keep it against the red hot rivet and drive it true.

"When I was handed one I was a bit appalled. It looked like a formidable weapon. But there was no possibility of welching on the job. About fifty men were watching me, and I never would take a dare.

"After the first few rivets there were grins of approval. 'She sure can do it,' said one man. The foreman got so interested that he made me keep on until I had driven twenty-five.

"After the first two days at the plant I ached in more different places than I had ever thought I could. It was part of my plan to work in as many different departments as possible, and nearly every one developed a new set of muscles.

"The assembly yard got my back, the riveting paralyzed my arms, the mould loft gave me housemaid's knee, for every bit of the measuring and marking had to be done kneeling on the floor. I did a lot of painting and helped to camouflage a ship, which was fascinating work, but I got paint in my eye and nearly lost my sense of smell.

"The worst job that I ever tackled," Mrs. Harrison continued, "was rivet passing on one of the hulls. I was part of a gang that was working between decks. There were several others working in the same small space and the noise was deafening. For twenty-four hours afterward I was stone deaf and the hammers pounded in my head until I thought I should go wild.

Speed Contests of Little Use.

"There was one definite conclusion that I reached from watching the riveters' work, and that is that speed contests, except as they serve to rouse rivalry between shipyards, are not good things. A riveter who drives several thousand rivets in a day is not fit for work for several days after.

"The most trying part of my work on the ships was the climbing. A ladder at an angle is bad enough, but the ship's ladders were perfectly perpendicular. At times there weren't any ladders at all and we went up and down the shelves.

"The shelves are formed by the horizontal frames that strengthen the shell plating and they are about three feet apart—some distance for any one not a man or a monkey. However, I learned a neat little trick about those shelves. By going up and down in spots where there were also vertical frames I had something more to hold on to. It wasn't bad going up, but it was awful going down.

"The two hardest things are to pull yourself up with a drift pin stuck in a rivet hole when you are climbing a ladder set back a foot or so from the edge of the dock, and to step off a ladder across a space of a couple of feet, with a hatch thirty feet deep under you. The meanest thing about climbing is when you take hold of a loose bolt and it slips in your hand.

"There was always an audience watching me, however, and I'd have died rather than let those men see I minded it. Soon, as a matter of fact, I didn't. It is all practice and a certain amount of determination.

Shop Work Especially Interesting.

"I had two wonderful mornings in the joiners' and sheet metal shops. In the former I found the work particularly interesting for a woman. All the machines are electrically run and comparatively simple to operate.

"The foreman of the shop gave me a number of different jobs to do and I marvelled for the thousandth time at the labor, skill, ingenuity and millions of parts that go to make a ship. For instance, all the panelling, furniture and fittings that go into a ship have to be adjusted to the sheer from bow to stern and curve athwart ships. This means that they must be constructed on a certain bevel that makes them set true when they are put aboard ship. One of the foremen told me he thought women could easily learn the trade and make good workmen.

"'I am glad to see a woman working down here,' he said, 'and I believe there'll soon be women in shipyards just the same as in munition plants.'

"I kept the regular hours, starting work at 7:25 A. M. and knocking off at 5:25 P. M. For the most part, except for visits of inspection to shops such as the boiler shop, the blacksmith shop or the copper shop, where there is little a woman can do, I was actually working."

The National Service Section of the United States Shipping Board Emergency Fleet Corporation proposes to publish as a booklet Mrs. Harrison's account of her experiences for distribution among the women in the families of shipyard workers.